

## Abstract

An optoelectronic sensor, which is based on optodes and with which, thanks to optode material that has been rendered reflective, virtually any angle for injecting the light into the optode material is feasible, is proposed. Thus, advantageously, a longer optical path is achieved than would be feasible in the case of total reflection. Thus greater measuring precision can be achieved. In the present case the optode material is a polymer, reflectivity being provided by introducing metal particles into the polymer. The light emitter and the light-sensitive sensors are an LED and photodiodes respectively. A plurality of optoelectronic sensors can be combined to form a gas sensor array.

(Figure 1)